

108TH CONGRESS  
1ST SESSION

# H. R. 1645

To establish a research, development, and demonstration program in genetics, protein science, and computational biology of microbes and plants to support the energy and environmental mission of the Department of Energy.

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## IN THE HOUSE OF REPRESENTATIVES

APRIL 7, 2003

Mr. BOEHLERT introduced the following bill; which was referred to the  
Committee on Science

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## A BILL

To establish a research, development, and demonstration program in genetics, protein science, and computational biology of microbes and plants to support the energy and environmental mission of the Department of Energy.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. GENOMES TO LIFE.**

4       (a) PROGRAM.—

5               (1) ESTABLISHMENT.—The Secretary shall es-  
6       tablish a research, development and demonstration  
7       program in genetics, protein science, and computa-  
8       tional biology of microbes and plants to support the

1 energy and environmental mission of the Depart-  
2 ment.

3 (2) GRANTS.—The program shall support indi-  
4 vidual investigators and multidisciplinary teams of  
5 investigators through competitive, merit-reviewed  
6 grants.

7 (3) CONSULTATION.—In carrying out the pro-  
8 gram, the Secretary shall consult with other Federal  
9 agencies that conduct genetic and protein research.

10 (b) GOALS.—The program shall have the goal of de-  
11 veloping technologies and methods based on the biological  
12 functions of microbes and plants that—

13 (1) can facilitate the production of fuels, includ-  
14 ing hydrogen;

15 (2) convert carbon dioxide to organic carbon;  
16 and

17 (3) detoxify soils and water at Department fa-  
18 cilities contaminated with heavy metals and radio-  
19 logical materials.

20 (c) PLAN.—

21 (1) DEVELOPMENT OF PLAN.—Within one year  
22 after the date of enactment of this Act, the Sec-  
23 retary shall prepare and transmit to the Congress a  
24 research plan describing how the program author-  
25 ized pursuant to this section will be undertaken to

1 accomplish the program goals established in section  
2 (b).

3 (2) REVIEW OF PLAN.—The Secretary shall  
4 contract with the National Academy of Sciences to  
5 review the research plan developed under this sub-  
6 section. The Secretary shall transmit the review to  
7 the Congress not later than 6 months after trans-  
8 mittal of the research plan under paragraph (1),  
9 along with the Secretary's response to the rec-  
10 ommendations contained in the review.

11 (d) FACILITIES.—In carrying out the program under  
12 this section, the Secretary may construct, acquire and op-  
13 erate facilities necessary to carry out this section.

14 (e) NO BIOMEDICAL RESEARCH.—In carrying out  
15 this program, the Secretary shall not conduct biomedical  
16 research.

17 **SEC. 2. AUTHORIZATION OF APPROPRIATIONS.**

18 There are authorized to be appropriated to the Sec-  
19 retary of Energy such sums as may be necessary for each  
20 of the fiscal years 2004 through 2007 to carry out this  
21 Act.

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